



SRO 834 Waterproofing Specification – Retaining Walls Multi-Layer Bituminous Sheet Membranes – Protected System

Scope

Double layer, bituminous membrane system applied in sheets to approved substrates to form a fully bonded, protected continuous barrier on retaining walls against water penetration.

Applications

This double layer membrane system is suitable for situations where the likelihood of water penetration is high such as:

- On the positive side of retaining walls with foundations above the permanent water table
- Below grade basement walls above the permanent water table level

Substrates

Suitable substrates for this membrane include:-

- Concrete
- Masonry (concrete block) walls - core filled including reinforcement
- Brick walls with render finish

Substrate Preparation

Substrates to which the bituminous sheet membrane are to be applied must be structurally sound and free of all contaminants (e.g. laitance). The substrates must have completed the recommended minimum curing/drying periods (e.g. 28 days for concrete) with all holes/voids filled with cement based patching mortars (e.g. [ARDEX A 46](#) or [ARDEX BR 345](#) system) and all surface protrusions ground flat. All internal corners are to be shaped with a cement based coving fillet (minimum 50 x 50mm).

Membrane System

- [ARDEX WPM 188](#) Bituminous sheet membrane (two layers)

Priming

- Prime all prepared substrates with [ARDEX WPM 240](#) Bituminous primer and let dry

Membrane Installation – torch on membrane

- Apply the sheet membrane to the prepared substrates using LPG or LNG torch techniques with sheet overlaps (100mm side-laps and 150mm end-laps) fully welded together
- Begin application from the lowest points of the structure and work upwards to the highest points.

Once the bituminous sheet membrane has been applied, the top (free) edge terminations shall be secured by one of the following systems

- [ARDEX Pressure Seal](#) mechanically fixed into position including a suitable sealant to the top edge. Eg Ardex Bituminous Roof Sealant.
- Liquid applied flashing such as the [ARDEX WPM 179](#) Bituminous latex



Protection

The bituminous sheet membrane must be protected from sunlight and mechanical damage by covering with suitable protective materials such as;

- Ardex Protection Board
- Approved proprietary drainage cell systems such as [ARDEX DRS 10/18 GC](#)

Note: bituminous membranes are not compatible with tile adhesives.

Disclaimer:

The recommendation selected is based upon questions answered on the ARDEX Australia website. This recommendation is designed as a general application for your described situation and should not be considered site specific documentation for general distribution. Always consult the latest relevant ARDEX Technical Bulletins and information on the product packaging and/or product data sheets (available on the ARDEX Website). Australian and other relevant standards should be followed during installation. If you have any further questions or would like further clarification please contact the ARDEX Technical Services Hotline on 1800 224 070 (9am to 5pm Monday to Friday).